

Claims

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What is claimed is:

- 1) A network-based automated message handling system for initiating responses to messages transmitted through the network by application components, said
10 system comprising:
- at least one customer-defined message handling rule;
 - a message-handler, said message handler comprising a message receiver, a message resolver, a rule applier, and a message generator, wherein said message receiver receives messages from application components, wherein said resolver determines
15 whether application of said at least one customer-defined message handling rule is indicated by the contents of a message, wherein said rule applier determines whether said at least one customer-defined rule should be applied to the contents of a received message, and wherein said message generator generates new messages to recipients identified by said at least one customer-defined message handling rule when application
20 of said customer-defined message handling rule is indicated by the contents of the message.

2) A network based automated message handling system according to claim 1, wherein said at least one customer-defined message handling rule directs notification of a third party software developer when a software fault is indicated by the contents of a message.

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3) A network based automated message handling system according to claim 1, further comprising a customer-interface portal, said portal providing an interface for a customer to express customer-defined rules.

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4) A network based automated message handling system according to claim 3, wherein said portal interface for allowing a customer to define customer-defined rules allows a customer to express rules identifying messages for which the contents of the message should be automatically forwarded to at least one desired recipient.

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5) A network-based automated message handling system according to claim 4, wherein said portal interface allows a customer to identify a delivery method for messages to be automatically forwarded to said at least one desired recipient from a list of available delivery methods, wherein at least one of the available delivery methods is a pager notification method.

6) A network-based automated message handling system according to claim 4, wherein said portal interface allows a customer to identify a delivery method for messages to be automatically forwarded to said at least one desired recipient from a list of available delivery methods, wherein at least one of the available delivery methods is an e-mail notification.

7) A network-based automated message handling system according to claim 4, wherein said portal interface allows a customer to identify a delivery method for messages to be automatically forwarded to said at least one desired recipient from a list of available delivery methods, wherein at least one of the available delivery methods is a message posted to an internet address.

8) A network-based automated message handling system according to claim 4, wherein said portal interface allows a customer to express without prompting at least one desired recipient.

9) A network-based automated message handling system according to claim 4, wherein said application hosting system further comprises a contacts list tool, said contacts list tool identifying entities associated with a hosted application, wherein
5 said portal interface further identifies entities associated with a hosted application by reference to the contacts list tool, and presents the entities associated with a hosted application to a customer as potential recipients of an automatically forwarded message.

10) A network-based automated message handling system according to
10 claim 1, wherein said system further comprises at least one service-based rule, and wherein said rule applier further determines whether application of said at least one service-based rule is indicated by the contents of a message, and wherein said message generator generates new messages to recipients identified by said at least one service-based rule when said service-based rule is indicated by the contents of the message.

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11) A network-based automated message handling system according to claim 1, wherein said system further comprises at least one common rule, and wherein said rule applier further determines whether application of said at least one common rule is indicated by the contents of a received message, and wherein said message generator
20 generates new messages to recipients identified by said at least one common rule when said common rule is indicated by the contents of a received message.

12) A network-based automated message handling system according to claim 1, wherein said system further comprises at least one service-based rule and at least one common rule, and wherein said rule applier further determines whether application of said at least one service-based rule or said at least one common rule is indicated by the contents of a received message, and wherein said message generator generates new messages to recipients identified by said at least one service-based rule or said at least one common rule when application of said at least one service-based rule or said at least one common rule is indicated by the contents of a received message.

13) A process for automated dissemination of application component information, the process comprising the steps of:

- receiving from a customer at least one customer-defined message handling rule;
- receiving an information message from an application component;
- interpreting the components of the information message to determine whether application of the customer-defined message handling rule is indicated based on the contents of the information message;
- applying the at least one customer-defined message handling rule to the information message when application of the at least one customer-defined message handling rule is indicated by the contents of the information message;
- initiating said further action in accordance with the at least one customer-defined message handling rule when application of the at least one customer-defined

message handling rule to a received message results in a determination that components of a received information message require further action,;

generating at least one further message in accordance with the at least one customer-defined message handling rule when application of said at least one customer-defined message handling rule is indicated by the contents of the information message;
5 and

transmitting said at least one further message to a recipient identified by the at least one customer-defined message handling rule when application of said at least one customer-defined message handling rule is indicated by the contents of the
10 information message.

14) A process for automated dissemination of application component information according to claim 13, wherein the step of transmitting said at least one further message comprises transmitting said at least one further message via a pager
15 system.

15) A process for automated dissemination of application component information according to claim 13, wherein the step of transmitting said at least one further message comprises transmitting said at least one further message via an Internet
20 post operation.

16) A process for automated dissemination of application component information according to claim 13, wherein the at least one customer-defined message handling rule directs notification of a third party software developer when a software fault is indicated by the contents of an information message.

17) A process for automated dissemination of application component information according to claim 13, wherein the step of receiving from a customer at least one customer-defined message handling rule further comprises the steps of displaying a list of available delivery methods for automatic forwarding of messages to the customer, and determining from the customer a desired delivery method for transmission of a message to a desired recipient, wherein at least one delivery method comprises transmission to a pager.

18) A process for automated dissemination of application component information according to claim 13, wherein the step of receiving from a customer at least one customer-defined message handling rule further comprises the steps of displaying a list of available delivery methods for automatic forwarding of messages to the customer, and determining from the customer a desired delivery method for transmission of a message to a desired recipient, wherein at least one delivery method comprises e-mail transmission.

19) A process for automated dissemination of application component information according to claim 13, wherein the step of receiving from a customer at least one customer-defined message handling rule further comprises the steps of displaying a list of available delivery methods for automatic forwarding of messages to the customer, and determining from the customer a desired delivery method for transmission of a message to a desired recipient, wherein at least one delivery method comprises transmission via an Internet post operation.

20) A process for automated dissemination of application component information according to claim 13, wherein the step of receiving from a customer at least one customer-defined message handling rule further comprises the steps of determining a list of entities associated with a hosted application to which the at least one customer-defined message handling rule is applicable by reference to a contacts list tool and displaying the list of entities associated with the hosted application to which the at least one customer-defined message handling rule is applicable to the customer to assist the customer in determining desired recipients of forwarded messages.

21) A process for automated dissemination of application component information according to claim 13, further comprising the steps of:

determining at least one service-based rule;

5 interpreting the components of the information message to determine whether application of the at least one service-based rule is indicated by the contents of the information message;

applying the at least one service-based rule to the information message when application of the at least one service-based rule is indicated by the contents of the
10 information message;

generating at least one further message in accordance with the at least one service-based rule when application of said at least one service-based rule is indicated by the contents of the information message; and

transmitting said at least one further message to a recipient identified by
15 the at least one service-based rule when application of said at least one service-based rule is indicated by the contents of the information message.

22) A process for automated dissemination of application component information according to claim 13, further comprising the steps of:

determining at least one common rule;

interpreting the components of the information message to determine

5 whether application of the at least one common rule is indicated by the contents of the information message;

applying the at least one common rule to the information message when application of the at least one common rule is indicated by the contents of the information message;

10 generating at least one further message in accordance with the at least one common rule when application of said at least one common rule is indicated by the contents of the information message;

transmitting said at least one further message to a recipient identified by the at least one common rule when application of said at least one common rule is

15 indicated by the contents of the information message.

23) A computer-readable medium tangibly embodying instructions which, when executed by a computer, implement a process for automating message handling in a hosted application system, wherein the instructions when executed cause a message handler to:

- 5 determine from a customer at least one customer-defined message handling rule, said at least one customer-defined message handling rule identifying circumstances under which actions should be taken by a message handler, and actions to be taken by the message handler when circumstances under which the actions should be taken are communicated in a message received by the message handler; and
- 10 make said at least one customer-defined message handling rule available to a message handler via a computer network.

- 24) A computer-readable medium tangibly embodying instructions according to claim 23, wherein said at least one customer-defined handling rule further
- 15 comprises an action forwarding a received message to at least one further recipient.

25) A computer readable medium tangibly embodying instructions according to claim 24, wherein said action forwarding a received message further defines a transmission method for forwarding said message to said at least one further recipient.

5 26) A computer readable medium tangibly embodying instructions according to claim 25, wherein said transmission method causes said message to be forwarded to said at least one further recipient via a pager system.

27) A computer-readable medium tangibly embodying instructions
10 according to claim 25, wherein said transmission method causes said message to be forwarded to said at least one further recipient via e-mail.

28) A computer-readable medium tangibly embodying instructions according to claim 25, wherein said transmission method causes said message to be
15 forwarded to said at least one further recipient via an Internet post.

29) A computer-readable medium tangibly embodying instructions according to claim 23, wherein said circumstances under which actions should be taken by a message handler comprise receipt of a message identifying a software fault.

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30) A computer-readable medium tangibly embodying instructions according to claim 29, wherein the actions to be taken by the message handler when said circumstances comprise receipt of a message identifying a software fault include identification of at least one further recipient to whom a software fault message should
5 automatically be forwarded.

31) A computer-readable medium tangibly embodying instructions according to claim 30, wherein the step of determining from a customer at least one customer-defined message handling rule further comprises determining a list of potential
10 recipients to whom a software fault message may be automatically forwarded by reference to data stored in a contacts list management tool, and displaying the determined list to a customer to assist the customer in identifying recipients to whom a software fault message should automatically be forwarded.

32) A computer-readable medium tangibly embodying instructions according to claim 23, wherein the instructions when executed by a computer further cause a message handler to:

determine at least one service-based message handling rule, said at least
5 one service-based message handling rule identifying service-based circumstances under which actions should be taken by a message handler, and actions to be taken by the message handler when service-based circumstances under which the actions should be taken are communicated in a message received by the message handler; and

make said at least one service-based message handling rule available to a
10 message handler via a computer network.

33) A computer-readable medium tangibly embodying instructions according to claim 23, wherein the instructions when executed by a computer further cause a message handler to:

15 determine at least one common message handling rule, said at least one common message handling rule identifying common circumstances under which actions should be taken by a message handler, and actions to be taken by the message handler when common circumstances under which the actions should be taken are communicated in a message received by the message handler; and

20 make said at least one customer-defined message handling rule available to a message handler via a computer network.